PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	How is defensive medicine understood and experienced in a primary care setting? A qualitative focus group study among Danish general practitioners
AUTHORS	Assing Hvidt, Elisabeth; Lykkegaard, Jesper; Pedersen, Line Bjornskov; Pedersen, Kjeld; Munck, Anders; Kousgaard Andersen, Merethe

VERSION 1 – REVIEW

REVIEWER	Carmela Rinaldi Department of Translational Medicine, School of Medicine, University of Eastern Piedmont, Novara, Italy AND A.O.U. Maggiore della Carità, Novara, Italy Research fellow
REVIEW RETURNED	08-Oct-2017

GENERAL COMMENTS	General notes: Valuable and interesting article with qualitative approach on the subject of defensive medicine. Useful to talk about general medicine practitioners, which are often not included in the studies on this subject. The methodology used was detailed. It puts emphasis on qualitative research often little appreciated, but very useful in the field phenomenological. ABSTRACT "Objectives": lines 6 to 9, I suggest not to include only "within US healthcare setting" INTRODUCTION lines 15 to 26: it refers only to the literature of the USA, in Europe we also have valid studies, especially on the determinants of DM (see PMID: 27373579, PMID: 28534429 and PMID: 27873571). RESULTS It would be interesting to know if the concept of making a medical mistake was linked to DM. So being traumatized after making a mistake is directly linked to DM according to attending physicians? They are very detailed and sometimes redundant with Table 2. You might cut the repeated information. DISCUSSION "Comparison with existing literature": I would suggest, as for the introduction, a comparative reference to recent and specific European studies.

REVIEWER	Tom Vandersteegen Hasselt University Belgium
REVIEW RETURNED	20-Oct-2017

GENERAL COMMENTS	Are the references up-to-date and appropriate? A definition of DM is used that in my opinion is not the best available in literature and also does not define DM as it should be understood. For example, the definition used only considers so-called assurance behavior (i.e. ordering extra tests, ...), though fails to include so-called avoidance behavior (i.e. avoiding patients, procedures, ...). Thus, more comprehensive definitions and descriptions of DM are available, see e.g. - US Congress; Office of Technology Assessment. Defensive Medicine and Medical Malpractice. Washington, DC: US Government Printing Office; 1994. Publication OTA-H-602. - Studdert, David M., Michelle M. Mello, William M. Sage, Catherine M. DesRoches, Jordon Peugh, Kinga Zapert, and Troyen A. Brennan. "Defensive medicine among high-risk specialist physicians in a volatile malpractice environment." Jama 293, no. 21 (2005): 2609-2617. Do the results address the research question or objective? My main concern about this research paper is that the majority of the results, showing GPs' understanding of DM, are not at all about DM as usually defined and discussed in literature. The authors provide a (sub-optimal) definition of DM, while the GP's answers to the DM questions are about external pressures that cause them to practice "defensively". These external pressures are identified as the system, patients, self-pressure, peer pressure. Only a specific part of these external pressures, though, can be considered as DM. The authors seem to loose track of the essence of DM and, in my opinion, that is (exposure to) malpractice liability. I am not convinced that all the other external pressures can be categorized as DM. That is also why a good definition of DM is so important. Are the discussion and conclusions justified by the results? The study certainly adds to the existing literature, though, in my opinion, the discussion and conclusions are not what the results show. I completely agree that the GPs may experience external pressure from system, peers and patients as defensively or as DM. However, it is not DM because GPs think or believe it is DM! DM can be described in many ways, although these definitions should have one thing in common: malpractice liability. According to me, reading this paper shows that GPs experience certain (external) pressures as DM, while it actually is not DM. Thus, their image and understanding of DM is not what in academic literature usually is referred to as DM. Therefore, for me the conclusion after reading this paper is that the GPs that are studied have a completely different (wrong?) view of DM. Apart from medical liability, the other external pressures may/can/should be categorized as something else than DM.

	Specific comments - page 3, line 27: "similar advanced medical systems" --> Institutional aspects are important as well. - page 4, line 47: "a setting without financial liability" --> Financial liability is only part of liability that health care professionals (can) face. Also moral and reputation damage matter, and were even found to be more important for physician specialists in a Belgian context. - page 6, line 9-11: 4 + 2 + 1 = 7 focus groups, while there were only 6 focus groups? - page 8, line 22-38: In my opinion, just complying with imperatives (e.g. clinical guidelines) is not DM. However, if this complying is because of trying to reduce liability risk than it can be considered as DM. - page 9, line 35-45: Documenting a patient register just because it is demanded by the government is also not DM for me. However, documenting a patient register in order to be able to deliver proof in case of a patient complaint or lawsuit in case of a medical malpractice can be seen as DM. Nevertheless, I have to admit that sometimes there is a thin line between an action that is DM and an action that is not DM. For me, most examples in this paper, though, are not explained sufficiently as being DM. - page 17, line 40-42: Saying that this study has identified DM variables for further analysis seems a little bit strange, since "unnecessary tests" and "referrals" are classic examples of DM in DM literature.

REVIEWER	George Kirby Royal Shrewsbury Hospital England
REVIEW RETURNED	27-Oct-2017

GENERAL COMMENTS	Increasing understanding of defensive medicine is important in healthcare systems with finite resources. The authors should be complemented on a well written paper.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1:

ABSTRACT
#1: “Objectives”: lines 6 to 9, I suggest not to include only "within US healthcare setting"

Response:
We have now inserted a wider international perspective.

INTRODUCTION
#2: lines 15 to 26: it refers only to the literature of the USA, in Europe we also have valid studies, especially on the determinants of DM (see PMID: 27373579, PMID: 28534429 and PMID: 27873571).

Response:
Thank you very much for passing on this interesting literature to us. We are now referring to these studies in the paper.

RESULTS
#3: It would be interesting to know if the concept of making a medical mistake was linked to DM. So being traumatized after making a mistake is directly linked to DM according to attending physicians? They are very detailed and sometimes redundant with Table 2. You might cut the repeated information.

Response:
Our aim did not include an investigation of determinants of DM. However, our data does indicate that making mistakes was in many cases linked to future defensive practices, albeit not, we believe, to trauma. This is, of course, dependant on how you define and understand trauma.
Concerning your remark on the results being redundant with Table 2, we are not sure that we understand where this redundancy can be seen. We find all the information in Table 2 useful, since it shows the interview guide used during the focus group interviews.

DISCUSSION
#4: “Comparison with existing literature”: I would suggest, as for the introduction, a comparative reference to recent and specific European studies.

Response:
Specific European studies have now been included in the Discussion section.

Reviewer 2:

Are the references up-to-date and appropriate?

#1: A definition of DM is used that in my opinion is not the best available in literature and also does not define DM as it should be understood. For example, the definition used only considers so-called assurance behavior (i.e. ordering extra tests, ...), though fails to include so-called avoidance behavior (i.e. avoiding patients, procedures, ...). Thus, more comprehensive definitions and descriptions of DM are available, see e.g.

- US Congress; Office of Technology Assessment.
Defensive Medicine and Medical Malpractice. Washington, DC: US Government Printing Office; 1994. Publication OTA-H-602.

Studdert, David M., Michelle M. Mello, William M. Sage, Catherine M. DesRoches, Jordon Peugh, Kinga Zapert, and Troyen A. Brennan. "Defensive medicine among high-risk specialist physicians in a volatile malpractice environment." Jama 293, no. 21 (2005): 2609-2617.

Response:
Thank you for this precision. We have now broadened the definition to include both “assurance behaviour” and “avoidance behaviour”.

Do the results address the research question or objective?

#2: My main concern about this research paper is that the majority of the results, showing GPs’ understanding of DM, are not at all about DM as usually defined and discussed in literature. The authors provide a (sub-optimal) definition of DM, while the GPs’ answers to the DM questions are about external pressures that cause them to practice "defensively". These external pressures are identified as the system, patients, self-pressure, peer pressure. Only a specific part of these external pressures, though, can be considered as DM. The authors seem to loose track of the essence of DM and, in my opinion, that is (exposure to) malpractice liability. I am not convinced that all the other external pressures can be categorized as DM. That is also why a good definition of DM is so important.

Response:
Thank you for the comments regarding the central question of whether the findings of this study reflect DM as commonly defined. We agree with you that the way the participants of this qualitative study primarily talk about DM is not necessarily reflecting the standard definitions put forward in the research literature. However, our purpose with studying the understandings of and experiences with DM among Danish GPs was not to make group discussions resolve around what has already been defined as DM but to be explorative and investigate their understandings and experiences in order to possibly broaden our understanding of how the phenomenon of DM is understood and experienced in a different context (with a different legal tort system) than the ones already studied.
This purpose could only be realized through a qualitative methodology that rests on an inductive approach.

In line with this approach no “top-down” definitions of DM were presented to the participants while generating the data. We only asked them to describe their immediate associations to the phenomenon of what is usually termed DM (as shown in the interview guide). The results are therefore descriptive of what the GPs answered.

In the theme “Understandings”, we have tried to exemplify how the GPs reasoned that the standard definition of DM could be broadened to include daily unnecessary, meaningless and cumbersome actions that one feels a pressure to do. This understanding, we argue, can be seen as a context adequate understanding of DM that reflects the daily clinical realities of Danish GPs. Seen from a larger sociological perspective, it can be argued that the findings of this study reflect those powerful changes that have happened within healthcare, general practice and in society at large during the past decades.

Are the discussion and conclusions justified by the results?

#3: The study certainly adds to the existing literature, though, in my opinion, the discussion and conclusions are not what the results show. I completely agree that the GPs may experience external pressure from system, peers and patients as defensively or as DM. However, it is not DM because GPs think or believe it is DM! DM can be described in many ways, although these definitions should have one thing in common: malpractice liability.

According to me, reading this paper shows that GPs experience certain (external) pressures as DM, while it actually is not DM. Thus, their image and understanding of DM is not what in academic literature usually is referred to as DM. Therefore, for me the conclusion after reading this paper is that the GPs that are studied have a completely different (wrong?) view of DM. Apart
from medical liability, the other external pressures may/can/should be categorized as something else than DM.

Response:
The identified pressures represent the GP identified motives for acting defensively; not DM in itself. Please see the argumentation above and in the Discussion section.

Specific comments

#5: - page 3, line 27: "similar advanced medical systems" --> Institutional aspects are important as well.
Response:
The wording has been changed accordingly.

#6: - page 4, line 47: "a setting without financial liability" --> Financial liability is only part of liability that health care professionals (can) face. Also moral and reputation damage matter, and were even found to be more important for physician specialists in a Belgian context.
Response:
Yes, we very much agree. In order to simplify, we have omitted “financial liability”.

#7: - page 6, line 9-11: 4 + 2 + 1 = 7 focus groups, while there were only 6 focus groups?
Response:
Thank you for directing our attention to this error! We have now corrected the numbers.

#8: - page 8, line 22-38: In my opinion, just complying with imperatives (e.g. clinical guidelines) is not DM. However, if this complying is because of trying to reduce liability risk than it can be considered as DM.
Response:
As argued elsewhere, the GPs of this study have provided accounts of experiences of various forms of defensive medical practices. One of these was complying with clinical guidelines in cases where the guideline did not fit with the specific patient case and where compliance was thus perceived as meaningless. Complying with a guideline for the sole reason of living up to political regulations and without considering meaningful clinical decision-making was thus seen as a defensive behaviour.

#9: - page 9, line 35-45: Documenting a patient register just because it is demanded by the government is also not DM for me. However, documenting a patient register in order to be able to deliver proof in case of a patient complaint or lawsuit in case of a medical malpractice can be seen as DM. Nevertheless, I have to admit that sometimes there is a thin line between an action that is DM and an action that is not DM. For me, most examples in this paper, though, are not explained sufficiently as being DM.

Response:
We very much hope, that the clarifications inserted in the manuscript, makes it easier to accept the accounts of the GPs as their subjective understandings and experiences of DM.

#10: - page 17, line 40-42: Saying that this study has identified DM variables for further analysis seems a little bit strange, since "unnecessary tests" and "referrals" are classic examples of DM in DM literature.
Response:
This information has been omitted.

Reviewer 3:

Please leave your comments for the authors below

#1: Increasing understanding of defensive medicine is important in healthcare systems with finite resources. The authors should be complemented on a well written paper.
Response:
Thank you very much!

VERSION 2 – REVIEW

REVIEWER	Carmela Rinaldi University of Eastern Piedmont, Department of Translational Medicine, Novara, Italy
REVIEW RETURNED	09-Nov-2017

GENERAL COMMENTS	I believe that the criteria for publishing have been met. The author has revised and corrected the manuscript according to the instructions of the referees. The paper is a simple understanding that highlights an important issue to be explored.

REVIEWER	Tom Vandersteegen Hasselt University, Belgium
REVIEW RETURNED	15-Nov-2017

GENERAL COMMENTS	The authors did a good job in responding to the reviewers' questions. I believe the results are now better in line with the research objective. For me, the major outcome of this research is that Danish GPs consider DM in a broader way than "traditional DM" in existing literature. Therefore, I suggest that this is also clearly described in the discussion section.

VERSION 2 – AUTHOR RESPONSE

We are happy that you recommend publication of the manuscript. Thank you very much for your comments. Below we have responded to the one comment put forward by reviewer 2 and explained the revisions we have made to the manuscript. These have been highlighted in the revised manuscript using the track changes function.

Reviewer 2 comments to author:

#1: The authors did a good job in responding to the reviewers' questions. I believe the results are now better in line with the research objective.
For me, the major outcome of this research is that Danish GPs consider DM in a broader way than "traditional DM" in existing literature. Therefore, I suggest that this is also clearly described in the discussion section.
Response:
We agree with you. We have inserted a section in the Discussion section in which we underline, that the research findings of this study show that the GPs of this study understand DM more broadly than how the phenomenon has been predominately described in the literature (please see p. 15).